rubber material of the casing due to the turning of the interlocking brackets **14** and **31**. That is, by selecting a proper shim for providing a desired height "H" for the aperture **36**, one also selects the resulting thickness of the rubber material present between the brackets, e.g., the intervening rubber material at **42**. As the ankle pivots during walking, the rigid surfaces of the brackets **14** and **31** approach one another while compressing the intervening rubber material of the casing. The resistance of the rubber material to further compression increases as the ankle pivots. When this resistance equals the turning load on the ankle, the rubber material acts as a fixed stop against further rotation. Since the expected load on the ankle and the compression resistance of the rubber material are known, one skilled in the art can select a shim for a desired height "H" to permit a predetermined rotation stop for the ankle. Of course, other forms of the rigid stops could instead be used.

The ankle according to the invention has a higher load range of increasing moment of resistance, compared to prior art ankles which flatten out over lower load ranges. Preferable angles of movement permitted by the stops are as follows:

Internal/External rotation: ±11° to 15°.

Plantar flexion: 13° to 15°.

Dorsi flexion: 13° to 15°.

Inversion/Eversion: ±5° to 10°.

Anterior/Posterior translation: ±0.10 to 0.375 inches.

Medial/Lateral translation: ±0.05 to 0.250 inches.

Vertical displacement: 0.030 to 0.375 inches.

Obviously, numerous modifications and variations of the present invention are possible in light of the above teachings. It is therefore to be understood that the invention may be practiced otherwise than as specifically described herein.

What is claimed is:

1. A multi-axis prosthetic ankle comprising:

a bottom component adapted to be connected to a prosthetic foot;

a lower leg connection component adapted to be connected to a prosthetic lower leg;

an elastomeric material securely connecting said bottom component with said lower leg connection component; and

a mechanical device suspended in said elastomeric material, said mechanical device comprising a first rigid element connected to said bottom component and not to said lower leg connection component, and a second rigid element connected to said lower leg connection component and not to said bottom component, wherein said first and second elements interlockingly float in said elastomeric material, and are not in direct contact with one another, such as to permit relative movement of said bottom component and said lower leg connection component by deformation of said elastomeric material.

2. The multi-axis prosthetic ankle of claim **1**, wherein said elastomeric material is bonded to said bottom component, said lower leg connection component and said mechanical device.

3. The multi-axis prosthetic ankle of claim **1**, further comprising at least one mechanical stop adapted to limit rotation of said bottom relative to said lower leg connection component.

4. The multi-axis prosthetic ankle of claim **1**, wherein said first rigid element comprises a generally "U" shaped first part connected to said bottom component so as to define a first aperture, and wherein said second rigid element comprises a generally "U" shaped second part connected to said lower leg connection component so as to define a second aperture, wherein said first part floatingly passes through said second aperture and said second part floatingly passes through said first aperture.

5. The multi-axis prosthetic ankle of claim **1**, wherein said lower leg connection component includes a pyramid connector and a dome.

6. The multi-axis prosthetic ankle of claim **1**, wherein said elastomeric material is a polymer rubber.

7. The multi-axis prosthetic ankle of claim **1**, wherein said elastomeric material is a polymer rubber having a shore A hardness of 50 to 99.

8. The multi-axis prosthetic snide of claim **7**, further comprising a snap on dome mounted to said lower leg connection component said dome being coded to the hardness of the polymer rubber.

9. The multi-axis prosthetic ankle of claim **1**, wherein a height of one of said first and second apertures is adjustable.

10. A multi-axis prosthetic ankle comprising:

a bottom component adapted to be connected to a prosthetic foot;

a lower leg connection component adapted to be connected to a prosthetic lower leg;

an elastomeric material securely connecting said bottom component with said lower leg connection component;

a generally "U" shaped first rigid part connected to said bottom component so as to define a first aperture;

a generally "U" shaped second rigid part connected to said lower leg connection component so as to define a second aperture, wherein said first part floatingly extends through said second aperture and said second part floatingly extends through said first aperture.

11. The multi-axis prosthetic ankle of claim **10**, wherein said elastomeric material is bonded to said bottom component, said lower leg connection component, and said first and second rigid parts.

12. The multi-axis prosthetic ankle of claim **10**, further comprising at least one mechanical stop positioned to prevent a deformation of said elastomeric material from reaching the elastic limit thereof.

13. The multi-axis prosthetic ankle of claim **10**, wherein said lower leg connection component includes a pyramid connector and a dome.

14. The multi-axis prosthetic ankle of claim **10**, wherein said elastomeric material is a polymer rubber.

15. The multi-axis prosthetic ankle of claim **10**, wherein said elastomeric material is a polymer rubber having a shore A hardness of 50 to 99.

16. The multi-axis prosthetic ankle of claim **15**, further comprising a snap on dome mounted to said lower leg connection component, said dome being coded to the hardness of the polymer rubber.

17. A multi-axis prosthetic ankle comprising:

a bottom component adapted to be connected to a prosthetic foot;

a lower leg connection component adapted to be connected to a prosthetic lower leg;

an elastomeric material securely connecting said bottom component with said lower leg connection component; and

rigid mechanical means molded and suspended in said elastomeric material for limiting a deformation of said elastomeric material.

18. The multi-axis prosthetic ankle of claim **17**, wherein said lower leg connection component includes a pyramid connector and a dome.